

**AMENDMENTS TO THE CLAIMS**

1. (Canceled)
2. (Canceled)
3. (Canceled)
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- 42. (Canceled)
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- 46. (Canceled)
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- 50. (Canceled)
- 51. (Canceled)
- 52. (Canceled)
- 53. (Canceled)
- 54. (Canceled)
- 55. (Previously presented) A resid fuel additive comprising;
  - a plant oil extract selected from the group consisting of hops oil extract, fescue oil extract, barley oil extract, green clover oil extract, wheat oil extract and mixtures thereof;
  - a carotenoid; and
  - a thermal stabilizer.
- 56. (Previously presented) The additive of claim 55 wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.

57. (Previously presented) The additive of claim 55, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.
58. (Previously presented) The additive of claim 55 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.
59. (Previously presented) The additive of claim 55 wherein the thermal stabilizer is meadowfoam oil.
60. (Previously presented) The additive of claim 55 further comprising a diluent.
61. (Currently amended) The additive of claim 55 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, resid fuel, jet fuel, ~~resid fuel~~ gasoline, 2 cycle oil, ~~resid fuel~~ diesel and mixtures thereof.
62. (Previously presented) The additive of claim 55 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
63. (Canceled)
64. (Previously presented) A resid fuel comprising a base fuel and at least one additive wherein the additive comprises:  
a plant oil extract derived from grain;  
  
a carotenoid; and

a thermal stabilizer.

65. (Previously presented) The resid fuel of claim 64, wherein the grain is selected from the group consisting of fescue, clover, wheat, barley, oats, rye, sorghum, flax, triticale, rice, corn, spelt, millet, amaranth, buckwheat, quinoa, kamut and teff.
66. (Previously presented) The resid fuel of claim 64 wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
67. (Previously presented) The resid fuel of claim 64, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.
68. (Previously presented) The resid fuel of claim 64 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.
69. (Previously presented) The resid fuel of claim 64 wherein the thermal stabilizer is meadowfoam oil.
70. (Previously presented) The resid fuel of claim 64 further comprising a diluent.
71. (Currently amended) The resid fuel of claim 64 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, ~~resid-diesel~~ fuel, jet fuel, ~~resid-fuel~~ gasoline, 2 cycle oil and resid fuel and mixtures thereof.
72. (Previously presented) The resid fuel of claim 64 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants,

anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.

73. (Previously presented) The resid fuel of claim 64 wherein the plant oil extract is barley oil extract, the carotenoid is  $\beta$ -carotene.

74. (Previously presented) A resid fuel comprising a base fuel and at least one additive wherein the additive comprises:

a hydrophobic plant oil extract;

a carotenoid; and

a thermal stabilizer selected from the group consisting of peanut oil, cottonseed oil, rape seed oil, macadamia oil, avocado oil, palm oil, palm kernel oil, meadowfoam oil and mixtures thereof.

75. (Previously presented) The resid fuel of claim 74 wherein the plant oil extract is derived from a member of the Leguminosae family.

76. (Previously presented) The resid fuel of claim 74 wherein the plant oil extract is derived from grain.

77. (Previously presented) The resid fuel of claim 74 further comprising a diluent.

78. (Currently amended) The resid fuel of claim 74 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, ~~resid fuel~~ gasoline, jet fuel, ~~resid-diesel~~ fuel, 2 cycle oil and resid fuel and mixtures thereof.

79. (Previously presented) The resid fuel of claim 74 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
80. (Previously presented) The resid fuel of claim 74, wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
81. (Previously presented) The resid fuel of claim 74 wherein the plant oil extract is barley oil extract, the carotenoid is  $\beta$ -carotene.
82. (Previously presented) A resid fuel comprising a base feed and at least one additive wherein the additive comprises:
- a plant oil extract selected from the group consisting of hops oil extract, fescue oil extract, barley oil extract, green clover oil extract, wheat oil extract and mixtures thereof;
- a carotenoid; and
- a thermal stabilizer.
83. (Previously presented) The resid fuel of claim 82 wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
84. (Previously presented) The resid fuel of claim 82, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof

85. (Previously presented) The resid fuel of claim 82 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.
86. (Previously presented) The resid fuel of claim 82 wherein the thermal stabilizer is meadowfoam oil.
87. (Previously presented) The resid fuel of claim 82 further comprising a diluent.
88. (Currently amended) The resid fuel of claim 82 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, ~~resid fuel~~ gasoline, jet fuel, ~~resid-diesel~~ fuel, 2 cycle oil and resid fuel and mixtures thereof.
89. (Previously presented) The resid fuel of claim 88 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
90. (Canceled)
91. (New) A resid fuel additive comprising:  
a plant oil extract derived from barley;  
 $\beta$ -carotene; and  
a thermal stabilizer.
92. (New) The additive of claim 91 further comprising a diluent.



93. (New) The additive of claim 91 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, resid fuel, jet fuel, resid fuel, 2 cycle oil, resid fuel and mixtures thereof.
94. (New) The additive of claim 91 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
95. (New) A resid fuel additive comprising:  
a hydrophobic plant oil extract;  
a carotenoid;  
a thermal stabilizer selected from the group consisting of peanut oil, cottonseed oil, rape seed oil, macadamia oil, avocado oil, palm oil, palm kernel oil, meadowfoam oil and mixtures thereof; and  
a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, resid fuel, jet fuel, diesel fuel, 2 cycle oil, gasoline and mixtures thereof.
96. (New) The additive of claim 95 wherein the plant oil extract is barley oil extract, and the carotenoid is  $\beta$ -carotene.
97. (New) The additive of claim 95 further comprising meadowfoam oil.